ABSTRACT OF THE DISCLOSURE

A memory module comprises a stab resistor between a pin and one end of a bus. A plurality of memory chips is connected to the bus between both ends thereof. A terminating resistor is connected to the other end of the bus. Stab resistance Rs of the stab resistor and terminating resistance Rterm of the terminating resistor are given by:

$$Rs = (N-1) \times Zeffdimm/N, \text{ and}$$

$$Rterm = Zeffdimm$$

where N represents the number of the memory modules in a memory system; and Zeffdimm, effective impedance of a memory chip arrangement portion consisting of the bus and the memory chips. In the memory system, the memory modules are connected to a memory controller on a motherboard in a stab connection style. Wiring impedance Zmb of the motherboard is given by:

$$Zmb = (2N-1) \times Zeffdimm/N^2.$$